

Title (en)  
METHOD AND SYSTEM FOR REAL-TIME AND RELIABLE AUTONOMOUS VEHICLE FAULT DIAGNOSIS AND PROTECTION

Title (de)  
VERFAHREN UND SYSTEM FÜR ZUVERLÄSSIGE FEHLERDIAGNOSE IN ECHTZEIT UND SCHUTZ FÜR AUTONOME FAHRZEUGE

Title (fr)  
PROCÉDÉ ET SYSTÈME DE DIAGNOSTIC ET DE PROTECTION EN TEMPS RÉEL ET FIABLE DES DÉFAUTS D'UN VÉHICULE AUTONOME

Publication  
**EP 3882725 A1 20210922 (EN)**

Application  
**EP 21163721 A 20210319**

Priority  
CN 202010200564 A 20200320

Abstract (en)  
A method for autonomous vehicle fault diagnosis and protection, comprising steps of: (S1) acquiring fault information of at least one functional module in an autonomous vehicle system and overall state information of the autonomous vehicle system in real time; (S2) determining fault handling information of the vehicle by analyzing the acquired fault information and the overall state information of the autonomous vehicle system; and (S3) sending the fault handling information to a control and execution layer of the vehicle for processing. With the fault diagnosis system including software and hardware according to the present disclosure, the operation situations of the autonomous vehicle software system and the vehicle hardware equipment can be monitored, and the fault handling information of the vehicle can be rapidly sent to a vehicle control unit, thereby ensuring that security measures can be quickly taken in the case of an emergency of the vehicle.

IPC 8 full level  
**G05B 19/042** (2006.01); **B60W 50/04** (2006.01); **G07C 5/08** (2006.01)

CPC (source: CN EP US)  
**B60W 50/0205** (2013.01 - EP); **B60W 60/00186** (2020.02 - EP); **G05B 19/0428** (2013.01 - EP); **G05B 23/0213** (2013.01 - CN); **G05D 1/0055** (2024.01 - US); **G07C 5/008** (2013.01 - US); **G07C 5/0808** (2013.01 - EP); **G07C 5/0816** (2013.01 - US); **B60W 2556/55** (2020.02 - EP); **G05B 2219/2637** (2013.01 - EP)

Citation (applicant)  
CN 201110026142 A 20110125

Citation (search report)

- [X] US 2020074771 A1 20200305 - YANG KAI [CN], et al
- [I] US 2019066409 A1 20190228 - MOREIRA DA MOTA EDUARDO DA CRUZ ANTUNES [PT]
- [I] US 2019064803 A1 20190228 - FRAZZOLI EMILIO [CH], et al

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CN114237175A

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**EP 3882725 A1 20210922**; CN 113495547 A 20211012; US 2021295620 A1 20210923

DOCDB simple family (application)  
**EP 21163721 A 20210319**; CN 202010200564 A 20200320; US 202117206635 A 20210319